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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,001	05/06/2004	Frank A. Hunleth	0320-010	7655

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EXAMINER	
WONG, WILLIAM	
ART UNIT	**PAPER NUMBER**
2178	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/840,001	HUNLETH ET AL.	
	Examiner	Art Unit	
	William Wong	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2004 and 06 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-19 and 21-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-19 and 21-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 May 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/08/2004 and 03/02/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the following communication: Preliminary amendment on December 8, 2004 for application filed on May 6, 2004; IDS statements filed on November 8, 2004 and March 2, 2007. Claims 1-7, 9-19, and 21-39 are pending and have been examined. Claims 8 and 20 have been cancelled.

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted were filed on 11/08/2004 and 03/02/2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The disclosure is objected to because of the following informalities:

- The abbreviation TV (on page 2) should be spelled out with the abbreviation in parenthesis following.
- The abbreviation CRT (on page 6) should be spelled out with the abbreviation in parenthesis following.

Appropriate correction is required.

Claim Objections

4. Claims 1, 30, and 37 are objected to because of the following informalities:

- As per claims 1 and 37, there is lack of antecedent basis for the phrase "said clipping plane" because it was not previously recited.
- As per claim 30, "there with" should be "therewith".

Appropriate correction is required.

5. Additionally, a series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification only states in paragraph 21 that "Since the outer helix 63 is longer than the inner helix 61, it will typically have a smaller helical angle than the inner helix 61". This is describing a relationship between two helices, not a property of an angle of one of the helices.

8. Claim 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There is no discussion on how to ascertain the "length of said helical surface" (e.g. how to measure it).

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 30, the phrase "length of said helical surface" renders the claim indefinite because the phrase is not defined by the claim, the specification does not provide a standard for ascertaining the length of a helical surface, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 101

11. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 13-19, 21-24, 31-36, and 39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 13-19, 21-24, 31-36 and 39, the claims are not embodied on a computer-readable medium and are directed to nonfunctional descriptive material.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1-3, 6-7, 9, 12, 13-15, 18-19, 21, 24-28, 30-34, and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Robbins (US 2002/0126121 A1).

As per independent claim 1, Robbins teaches **a method for item selection comprising the steps of: displaying a helical surface having an axis** (in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (in paragraph 7); **and selecting one of said plurality of items** (in paragraphs 7 and 9); **and clipping from view items on said helical surface which are above a clipping**

plane (in paragraph 50, items above the area which defines the center-of-interest are clipped from view until brought into the center-of-interest by user input, and paragraph 81 with figure 21).

As per claim 2, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said plurality of items includes at least one of: media items, software applications and features associated with a software application** (in paragraph 9 and 11).

As per claim 3, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of displaying a helical surface further comprises the step of: displaying said helical surface with said axis oriented substantially perpendicular to a plane associated with a display screen** (in paragraph 54 and figures 7 and 9).

As per claim 6, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of providing a plurality of items on said helical surface further comprises the step of: allocating a portion of said helical surface to each of said plurality of items** (in paragraph 7).

As per claim 7, the rejection of claim 6 is incorporated and Robbins further teaches **wherein said portion is wedge-shaped** (in figure 3).

As per claim 9, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said step of displaying further comprises the step of: displaying said helical surface with said axis oriented substantially parallel to a plane associated with a display screen** (in figures 3-6 and 10-21).

As per claim 12, the rejection of claim 1 is incorporated and Robbins further teaches **scrolling through said plurality of items using a pointing device** (in paragraphs 55 and 89).

As per claim 25, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said helical surface comprises an outer helix, an inner helix and a surface therebetween** (in figures 3-21).

As per claim 26, the rejection of claim 25 is incorporated and Robbins further teaches **wherein said outer helix has a first helical angle associated therewith and said inner helix has a second helical angle associated therewith, said first helical angle being different from said second helical angle** (in figures 3-6 and 10-21).

As per claim 27, the rejection of claim 25 is incorporated and Robbins further teaches **wherein said surface is at least partially translucent or transparent** (in paragraph 80).

As per claim 28, the rejection of claim 1 is incorporated and Robbins further teaches **wherein said axis is linear** (in figures 3-21).

As per claim 30, as best understood by examiner, the rejection of claim 25 is incorporated and Robbins further teaches **wherein said outer helix and said inner helix have at least one helical angle associated there with which varies as a function of length of said helical surface** (in figures 3-6 and 10-21).

As per independent claim 37, Robbins teaches **a computer-readable medium containing a program that performs the steps of** (in paragraph 83)**: displaying a helical surface having an axis** (in paragraph 7 and figures 3-21)**; providing a**

plurality of items on said helical surface (in paragraph 7); **selecting one of said plurality of items** (in paragraphs 7 and 9); **and clipping from view items on said helical surface which are above said clipping plane** (in paragraph 50, items above the area which defines the center-of-interest are clipped from view until brought into the center-of-interest by user input, and paragraph 81 with figure 21).

As per independent claim 38, Robbins teaches **a method for item selection comprising the steps of: displaying a helical surface having an axis** (in paragraph 7 and figures 3-21); **providing a plurality of items on said helical surface** (in paragraph 7); **selecting one of said plurality of items** (in paragraphs 7 and 9); **and wherein said axis is substantially parallel to a plane associated with a screen on which said helical surface is displayed** (in figures 3-6 and 10-21).

As per independent claim 39, Robbins teaches **a user interface** (in abstract) **comprising: a helical surface having an axis** (in paragraph 7 and figures 3-21); **a plurality of items displayed on said helical surface** (in paragraph 7); **means for selecting one of said plurality of items** (in paragraphs 55, 89, 7 and 9); **and wherein said axis is substantially parallel to a plane associated with a screen on which said helical surface is displayed** (in figures 3-6 and 10-21).

Claims 13-15, 18-19, 21, 24, 31-34, and 36 are the user interface claims corresponding to the method claims 1-3, 6-7, 9, 12, 25-28, and 30 respectively, and are rejected under the same reasons set forth in connection with the rejection of claims 1-3, 6-7, 9, 12, 25-28, and 30. Robbins further teaches the means for performing the method (in paragraphs 55, 83, and 89).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. Claims 4, 10, 11, 16, 22, 23, 29, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1).

As per claim 4, the rejection of claim 3 is incorporated, but Robbins does not specifically teach **tilting said axis of said helical surface by a predetermined tilt angle relative to perpendicular to said plane associated with said display screen**. However, Asami teaches tilting an axis of a helical surface by a predetermined tilt angle relative to a perpendicular to a plane associated with a display screen (in paragraphs 304-305). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Robbins with the teaching of Asami in order to provide the user with a view of the menu showing more items and the general shape of the menu.

As per claim 10, the rejection of claim 9 is incorporated, but Robbins does not specifically teach **displaying a plurality of category labels along said helical surface which identify groups of said plurality of items**. However, Asami teaches displaying a plurality of category labels along a helical surface which identify groups of

said plurality of items (in figures 47-49 and 51-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Robbins with the teaching of Asami in order to provide contextual information to the user to aid in navigating the menu and increase organization.

As per claim 11, the rejection of claim 3 is incorporated and Robbins teaches **a view of said helical surface such that it is displayed with said axis oriented substantially parallel to said plane associated with said display screen** (in figures 3-6 and 10-21) and **changing** from having the axis *substantially parallel to said plane* to *substantially perpendicular to said plane* (in paragraph 54 and figures 6-7), but does not specifically teach changing to the substantially parallel view. However, Asami teaches a special command which restores a specific camera position (in paragraph 313). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robbins with the teaching of Asami in order to allow the user to easily return to the parallel view.

As per claim 29, the combination of Robbins and Asami teaches the method of claim 11, and both Robbins and Asami further teach **animating the transition** between views (Robbins, in paragraph 54 and 56; Asami, in paragraph 313).

Claims 16, 22, 23, and 35 are the user interface claims corresponding to the method claims 4, 10, 11, and 29 respectively, and are rejected under the same reasons set forth in connection with the rejection of claims 4, 10 11, and 29. Robbins further teaches the means for performing the method (in paragraphs 55, 83, and 89).

17. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robbins (US 2002/0126121 A1) in view of Asami (US 2002/0054158 A1) as applied to claim 4 above, and further in view of Matsuda (US 6,346,956 B2).

As per claim 5, the combination of Robbins and Asami teaches the method of claim 4, but does not specifically teach **wherein said predetermined tilt angle is within the range of 30-60 degrees**. However, Matsuda teaches a predetermined tilt angle with the range of 30-60 degrees (in column 33 lines 29-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tilt angle in such a manner in order to provide the user with a view of the menu showing more items and the general shape of the menu.

Claim 17 is the user interface claim corresponding to the method claim 5, and is rejected under the same reasons set forth in connection with the rejection of claim 5. Robbins further teaches the means for performing the method (in paragraphs 55, 83, and 89).

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5524196 A	Method and system for manipulating data through a graphic user interface within a data processing system	Blades; Jerry A.
US 5701424 A	Palladian menus and methods relating thereto	Atkinson; Robert G.
US 5706448 A	Method and system for manipulating data through a graphic user interface within a data processing system	Blades; Jerry Allen

US 20020033848 A1	System for managing data objects	Sciammarella, Eduardo Agusto et al.
US 6369837 B1	GUI selector control	Schirmer; Andrew L.
US 20020054129 A1	3D environment labelling	Heron, Dale R. et al.
US 6819344 B2	Visualization of multi-dimensional data having an unbounded dimension	Robbins; Daniel C.
US 20050097474 A1	Spiral scrollbar	Accot, Johnny I.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Wong whose telephone number is 571-270-1399. The examiner can normally be reached on M-F 7:30-5:00 EST with every other Friday 7:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William Wong
Patent Examiner